

CLAIMS

1. Oil Filtering device (1) for filtering oil used in rotational devices such as engine and transmission, comprising a micro filtration filter element (20, 22) having micro-
5 filtration means (20), the element having an interior space (21) , and the device comprising a filter housing (16) and a lid part (17) of said housing (16), tightening means (10) being provided for pressurised interconnection of said lid (17) and the housing (16), the device (1) comprising an oil inlet port (3) and an oil outlet port (9) in connection with a cylindrical interior space (21) of said filter part (5; 20; 20A-20D),
10 characterised in that the filtering device (1) is provided with a by pass means (25, 28) formed by an aperture (28) such as a bore, provided in a closing member (24) for closing off an axial end face of the filtration means (20), the aperture connecting the space in the filter device (1) exterior to the filter part (20, 20A-D) to an interior space (21) such that during operation of any system in which the device (1) is incorporated, a
15 minimum flow of oil through the filter device (1) is secured by said by pass means.
2. Filter Device (1) according to any of the preceding claims, characterised in that the device (1) comprises a filter part (5; 20; 20A-20D) of which the radial thickness of its filter means is larger than the radial thickness of its interior space, the axial end faces (20F; 20AF-20DF) of the filter part (5; 20; 20A-20D) being formed by the filtering
20 means of said part, and the device (1) being provided with internal, essentially flattened filter end face (20F; 20AF-20DF) contacting faces (14F, 24F, 16AF, 16BF, 17F), for axially closing a passage of oil, and having a diameter matching that of the filter part (5; 20; 20A-20D).
3. Filter Device (1) according to the preceding claim, characterised in that an oil
25 passage closing face (16AF, 16BF) is integrated in a housing part (16A, 16B, 17).
4. Filter device (1) according to the previous claim, characterised in that an oil passage closing face (16AF, 16BF) is integrated in a housing wall part having a thickness of more than twice the thickness of the majority of the wall part of a relevant unit (16) of the housing (16, 17).
- 30 5. Filter device (1) according to any of the previous claims, characterised in that the closing face is integrated in an insert member (14) fitting irregularities in shape of a relevant part (11) of the housing (16) at an axial side of the insert (14) opposing the closing face (14F), and preferably being provided with an O-ring corresponding to the largest diameter of the insert member (14).

6. Filter device (1) according to any of the preceding claims, characterised in that the device is at least at one end provided with a separate oil flow closing member (24), contacting an end face of the filter part at one axial end and contacting a housing part (17) via a spring loaded means (25).